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Henry Tan

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INTELLECTUAL PROPERTY GROUP

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EXAMINER

DANG, HUNG Q

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/586,070	TAN ET AL.	
	Examiner	Art Unit	
	Hung Q. Dang	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-19, and 22-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-19 and 22-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 08/28/2009 have been fully considered but they are not persuasive.

On pages 13-15, Applicant argues that neither Tabatabai nor Case disclose an apparatus with a portable storage device having a connector of a first type and an interface section having a connector of the first type, wherein the portable storage device first type connector can directly connect to a first video system first type connector and also directly connect to the interface section first type connector.

In response, the Examiner respectfully disagrees. At least Tabatabai discloses a portable device ("local device" 770 shown in Fig. 7 and described in paragraph [0055]) having a connector of a first type mounted on the portable device (Fig. 7; [0055]; wherein the first type is at least USB type shown in Fig. 7 or one of other types described in [0055]). Tabatabai also discloses an interface section having a connector of the first type at least in Fig. 7 and paragraph [0055], wherein the interface section comprises at least the "network interface 736" and "USB controller 720" as shown in Fig. 7. Further described in [0055], the interface section has the first type connector, which is at least a USB connector or one of other types as described in [0055]. As shown in Fig. 7, via the interface section, the portable storage device first type connector can directly connect to a first video system, is the server 720 (mistakenly denoted with numerical 740 in Fig. 7).

Also on pages 12-13 and 15, Applicant argues that the Examiner has not provided any other convincing line of reasoning for a finding of obviousness in the absence of the undisclosed limitations.

In response, the Examiner respectfully disagrees since the reasons for obviousness have been established and described in details in the Office Action.

Therefore, the Examiner respectfully submits that Applicant's arguments are not persuasive.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites two different HDMI connectors. One of them is the portable storage device connector. The other is the interface section connector. Yet, claim 8 further recites, "... for direct connection to the HDMI connector" thus being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention since it cannot be figured out which HDMI connectors of the two HDMI connectors described above, the recited limitation refers to.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-15, 19, 22-36, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabatabai et al. by (US 2003/0110297 – hereinafter Tabatabai), Case (US 2005/0063418 – hereinafter Case), and Kumagai (US Patent 6,512,722 – hereinafter Kumagai).

Regarding claim 1, Tabatabai discloses a device for recording and playing back video signals comprising: a) a portable storage device ([0055]; “local device 770” in Fig. 7) having: a portable storage device connector of a first type adapted to transfer video signals of the first type and which is mounted on the portable storage device (Fig. 7; [0055]; wherein the first type is at least USB type shown in Fig. 7 or one of other types described in [0055]), the portable storage device connector of the first type being for direct connection to a first video system having a video system connector of the first type for directly connecting to the portable storage device connector of the first type to transmit video signals of the first type to the portable storage device from the first video system to record and playback the video signals of the first type (Fig. 7; [0055] - wherein the portable storage device connector is at least a USB connector as shown in Fig. 7 or one of other types as described in [0055] – also wherein the first video system is the server 720 – mistakenly denoted with numerical 740 in Fig. 7); b) an interface section having an interface section connector of the first type for directly connecting to the portable storage device connector of the first type (Fig. 7; [0055] – wherein the interface section comprises at least the “network interface 736” and “USB controller 720” or any

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other types described in [0055] and wherein at least the USB interface as shown in Fig. 7 or any other type described in [0055] corresponds to the one of first type), the interface section being for converting to the video signals of the first type from video signals of a second type ([0044]), so that the apparatus is operable to transmit the video signals of the first type to the portable storage device through an interface section connector of the first type ([0055]) and exchanging the signals of second type between the first video system and a second video system through a signal connection between the interface section and the second video system ([0044]; [0054] – wherein the second video system is interpreted as any one of any subset of devices 760 and/or 710 as shown in Fig. 7 or one of components of the server is interpreted as the first video system while any other component or sets of components of the server is interpreted as a second video system since the server can be implemented as two or more computers as described in [0053]); the second video system for receiving video signals of a second type (Fig. 7; [0040]; [0041]; [0054]).

However, Tabatabai does not disclose the portable storage device having ii) a built-in encoder-and-decoder engine for encoding the video signals of the first type into compressed video data and for decoding the compressed video data into the video signals of the first type; iii) a non-volatile solid-state memory, for storing the compressed video data; and iv) a built-in microcontroller for sending the compressed video data to and receiving the compressed video data from the non-volatile solid-state memory; and the first video system receives the signals of first type from the portable storage device; converting to the video signals of the second type from the first type; transmitting the

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signals of the first type from the first video system to the second video system through the interface section connector of the first type and a signal connection between the interface section and the second video system.

Case discloses a first video system receives the signals of first type from a local storage device ([0036]-[0038]; [0041]); converting to the video signals of the second type from the first type ([0032]; [0036]-[0038]; [0042]); transmitting the signals of the first type from a first video system to a second video system through the interface section connector of the first type and a signal connection between the interface section and the second video system (Fig. 3; Fig. 4; [0040]; [0043]; [0044]; [0044]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Case into the device disclosed by Tabatabai in order to increase flexibility of the device by allowing bi-directional exchanges of video data between devices.

However, Tabatabai and Case do not disclose the portable storage device having ii) a built-in encoder-and-decoder engine for encoding the video signals of the first type into compressed video data and for decoding the compressed video data into the video signals of the first type; iii) a non-volatile solid-state memory, for storing the compressed video data; and iv) a built-in microcontroller for sending the compressed video data to and receiving the compressed video data from the non-volatile solid-state memory.

Kumagai discloses a portable storage device having ii) a built-in encoder-and-decoder engine for encoding the digital signals into compressed form and for decoding

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the compressed digital data into the digital signals (*Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62*); iii) a non-volatile solid-state memory, for storing the compressed digital data (*Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62*); and iv) a built-in microcontroller for sending the compressed digital data to and receiving the compressed digital data from the non-volatile solid-state memory (*Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kumagai into the apparatus disclosed by Tabatabai and Case to compress data before recording and to play back the recorded compressed data. The incorporated feature would make efficient use of storage capacity.

Regarding claim 2, Tabatabai and Case also disclose the video signals of the first type and second type also include audio signals which are recorded and played back by the apparatus (*Tabatabai: [0054]; [0055]. Case: [0041]; [0042]*).

Regarding claim 3, Kumagai also discloses the non-volatile solid-state memory comprises at least 8MB of memory capacity (*Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62*).

Regarding claim 4, Tabatabai and Case disclose a protocol controller for converting the video data to and from video signals of the first type into a data signal (*Tabatabai: [0055]. Case: [0036]-[0038]; [0041]; [0042]*).

Regarding claim 5, Tabatabai also discloses wherein the signal connection between the interface section and the second video system further comprises an

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interface section connector of the second type mounted to the interface section, the interface section connector of the second type being for direct connection to a video system connector of the second type mounted to the second video system for exchanging the signals of the second type through the interface section connector of the second type and the video system connector of the second type (*Fig. 3; Fig. 7; [0039]-[0041]; [0050]*).

Regarding claim 7, Tabatabai also discloses the portable storage device connector of the first type is a USB connector for direct connection to a computer (*[0055]*); the interface section connector of the first type is a USB connector for direct connection to the USB connector of the portable storage device connector (*[0055]; Fig. 7*); the video signals of the first type are USB protocol signals (*[0055]; Fig. 7*); and the protocol controller is a USB controller (*[0055]; Fig. 7*).

Tabatabai, Case, and Kumagai do not disclose the portable storage device connector is a USB male-type connector and the first video system connector of the first type and the interface connector of the first type are USB female-type connectors.

Official Notice is taken that one of ordinary skill in the art would have been motivated to use a USB male-type connector for the portable storage device connector and USB female-type connectors for the first video system connector of the first type and the interface connector of the first type to provide users with various connecting options.

Regarding claim 8, Case also disclose the portable storage device connector of the first type is an HDMI connector for direct connection to a television (*[0032]*); the

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interface section connector of the first type is a HDMI connector for direct connection to the HDMI connector ([0032]); the video signals of the first type are HDMI protocol signals ([0032]); and the protocol controller is a HDMI interface ([0032]).

Regarding claim 9, Case also disclose the interface section connector of the second type is an HDMI connector for direct connection to a television, the HDMI connector being mounted on the interface section (*Fig. 3; Fig. 4; [0032]-[0034]; [0042]; [0044]*); the video signals of the second type are HDMI protocol signals ([0032]); and the interface section is operable to convert between the USB and HDMI protocol signals ([0032]; [0036]; *Fig. 3; Fig. 4*).

Regarding claim 10, Case also discloses the interface section further comprises an interface section microcontroller for converting between the USB and HDMI protocol signals and wherein the interface section microcontroller is electrically connected between a USB controller connected to the interface section connector of the first type and an HDMI controller connected to the interface section connector of the second type, the interface section connector of the second type being a HDMI connector mounted on the interface section (*Fig. 3; Fig. 4; [0032]; [0036]*).

Regarding claim 11, Tabatabai also discloses wherein the interface section is integral with the second video system ([0054]).

Regarding claim 12, Tabatabai also discloses the interface section is integral with the portable storage device ([0054]).

Regarding claim 13, Tabatabai also discloses the portable storage device, when in use, is not in signal communication with both the first and second video systems (*Fig. 7; [0055]*).

Regarding claim 14, Case also discloses the interface section is encased in a housing separate from the portable storage device, the first video system and the second video system (*"Media Center" in Fig. 4; [0040]*).

Regarding claim 15, see the teachings of Tabatabai, Case, and Kumagai as discussed in claim 4 above. Further, Tabatabai, Case, and Kumagai also disclose the built-in encoder/decoder engine, the built-in microcontroller, and the protocol controller are operable to work in cooperation to convert the video data between the compressed format and video signals of the first type, the format of the compressed data selected from the set consisting of: MPEG 1, MPEG 2, MPEG-4, MP3, MPEG 7 and MPEG 21 (*Tabatabai: [0023]; [0039]; [0055]. Kumagai: Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62 – one of ordinary skill in the art would recognize that these elements must be working in cooperation in order to receive, compress, and store the data in a meaningful sequence*)..

Regarding claim 19, Case also discloses a key matrix coupled to the microcontroller to allow a user to control the recording and playing back of the video signals (*"Keyboard 79" in Fig. 3; "Wireless Keyboard 145" in Fig. 4*).

Regarding claim 22, Tabatabai discloses a method for recording and playing back video signals comprising the steps of: directly connecting a portable storage device connector of a first type mounted on a portable storage device to a video system

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connector of the first type of a first video system ([0055]); transferring video signals of the first type from the first video system to the portable storage device through the video system connector of the first type and the portable storage device connector of the first type ([0055]).

However, Tabatabai do not disclose encoding the video signals into compressed video data using an encoder engine built-into the portable storage device; storing the compressed video data in a memory section of the portable storage device to record the video signals of the first type; disconnecting the portable storage device connector of the first type from the first video system connector of the first type; directly connecting the portable storage device connector of the first type mounted on the portable storage device to an interface section connector of the first type of an interface section; decoding the compressed video data into decoded video signals using a decoder engine built into the portable storage device; passing the video signals of the first type through the portable storage device connector of the first type and the interface section connector of the first type into the interface section; converting the video signals of the first type into video signals of a second type by passing the signals through the interface section; passing the video signals of the second type to a second video system through a signal connection between the interface section and the second video system; and playing back the video signals on the second video system.

Case discloses directly connecting a portable storage device connector of the first type mounted on the portable storage device to an interface section connector of the first type of an interface section ([0041]); converting the video signals of the first type

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into video signals of a second type by passing the signals through the interface section ([0042]; [0043]; [0036]-[0040]); passing the video signals of the second type to a second video system through a signal connection between the interface section and the second video system ([0042]; [0043]; [0036]-[0040]); and playing back the video signals on the second video system ([0042]; [0043]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Case into the method disclosed by Tabatabai et al. in order to increase flexibility of the device by allowing bi-directional exchanges of video data between devices.

However, Tabatabai et al. and Case do not disclose encoding the video signals into compressed video data using an encoder engine built-into the portable storage device; storing the compressed video data in a memory section of the portable storage device to record the video signals of the first type; disconnecting the portable storage device connector of the first type from the first video system connector of the first type; and decoding the compressed video data into decoded video signals using a decoder engine built into the portable storage device.

Kumagai disclose encoding the video signals into compressed video data using an encoder engine built-into the portable storage device (*Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62*); storing the compressed video data in a memory section of the portable storage device to record the video signals (*Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62*); and decoding the compressed video

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data into decoded video signals using a decoder engine built into the portable storage device (*Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kumagai into the device disclosed by Tabatabai and Case in order to enhance storage capacity of the device by compressing data before storage.

However, Tabatabai, Case, and Kumagai do not explicitly disclose disconnecting the portable storage device connector of the first type from the first video system connector of the first type.

It would be obvious to one of ordinary skill in the art that a user can perform the step of disconnecting the portable storage device connector of the first type from the first video system connector of the first type after downloading and reconnecting to the interface section to transfer data to other devices as he or she desires.

Regarding claim 23, Case also discloses the signal connection between the interface section and the second video system comprises an interface connector of the second type mounted to the interface section directly connected to a video system connector of the second type mounted to the second video system for exchanging the signals of the second type through the interface section connector of the second type and the second video system connector of the second type ([0042]; [0043]; [0035]-[0040]; *Fig. 3; Fig. 4*).

Claim 24 is rejected for the same reason as discussed in claim 2 above.

Claim 25 is rejected for the same reason as discussed in claim 3 above.

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Claim 26 is rejected for the same reason as discussed in claim 4 above.

Claim 27 is rejected for the same reason as discussed in claim 6 above.

Claim 28 is rejected for the same reason as discussed in claim 7 above.

Claim 29 is rejected for the same reason as discussed in claim 8 above.

Claim 30 is rejected for the same reason as discussed in claim 9 above.

Claim 31 is rejected for the same reason as discussed in claim 10 above.

Regarding claim 32, Tabatabai et al. also disclose the interface section is integral with the first video system (*Fig. 7*).

Claim 33 is rejected for the same reason as discussed in claim 12 above.

Claim 34 is rejected for the same reason as discussed in claim 13 above.

Claim 35 is rejected for the same reason as discussed in claim 14 above.

Claim 36 is rejected for the same reason as discussed in claim 15 above.

Claim 40 is rejected for the same reason as discussed in claim 19 above.

Claims 16 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabatabai, Case, and Kumagai as applied to claims 1-5, 7-15, 19, 22-36, and 40 above, and further in view of Soundararajan (US Patent 7,355,624 – hereinafter Soundararajan).

Regarding claim 16, see the teachings of Tabatabai, Case, and Kumagai as discussed in claim 15 above. However, Tabatabai, Case, and Kumagai do not disclose the built-in encoder/decoder engine is programmable by the computer to encode/decode different compressed data formats.

Soundararajan discloses in encoder and decoder engines are programmable by a computer to encode/decode different compressed data formats (*column 3, lines 3-25; column 5, lines 35-47*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Soundararajan into the device disclosed by Tabatabai, Case, and Kumagai in order to provide users with programmable features.

Claim 37 is rejected for the same reason as discussed in claim 16 above.

Claims 17-18 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabatabai, Case, and Kumagai as applied to claims 1-5, 7-15, 19, 22-36, and 40 above, and further in view of Poo et al. (US 2003/0005337 – hereinafter Poo).

Regarding claim 17, see the teachings of Tabatabai, Case, and Kumagai as discussed in claim 3 above. However, Tabatabai, Case, and Kumagai do not disclose a biometrics-based authentication module coupled to and controlled by the microcontroller, wherein access to the non-volatile memory is granted to a user provided that the biometrics-based authentication module authenticates the user's identity and wherein access to the non-volatile memory is denied to the user otherwise.

Poo discloses a biometrics-based authentication module coupled to and controlled by the microcontroller, wherein access to the non-volatile memory is granted to a user provided that the biometrics-based authentication module authenticates the

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user's identity and wherein access to the non-volatile memory is denied to the user otherwise (*abstract*, [0007]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Poo into the device disclosed by Tabatabai, Case, and Kumagai in order to protect data from unauthorized access thus providing for data security.

Regarding claim 18, Poo also discloses in the biometrics-based authentication module includes a fingerprint sensor for acquiring data from the fingerprint of the user (*abstract*, [0007]).

Although Poo do not explicitly disclose sensing the thumbprint of the user, Official Notice is taken that one of ordinary skill in the art would have been motivated to sense the thumbprint of the user as an obvious choice of implementation.

Claim 38 is rejected for the same reason as discussed in claim 17 above.

Claim 39 is rejected for the same reason as discussed in claim 18 above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621